

# Particle ratios in PHENIX at RHIC

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## Abstract

The PHENIX experiment at Relativistic Heavy Ion Collider (RHIC) collected more than five million of Au+Au collisions at  $\sqrt{s} = 130$  GeV per nucleon during year 2000. The PHENIX Time-of-Flight (ToF) measurement opens an opportunity to investigate identified hadrons with transverse momentum up to 2.0 GeV/c. The systematic study of particle yields relates to baryon stopping via proton/anti-proton ratios, to the existence and mechanism of enhanced production of light strange mesons via  $K/\pi$  and  $K/p$  ratios, and to comparisons with predictions of chemical and thermal equilibration in these collisions. In this presentation, particle ratios, i.e.  $\pi^+/\pi^-$ ,  $K^+/K^-$  and proton/anti-proton will be presented as a function of centrality and transverse momentum.

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